DOCKET NO.: LWB-0042 Application No.: 10/626,297 Office Action Dated: May 18, 2005

PATENT REPLY FILED UNDER EXPEDITED PROCEDURE PURSUANT TO 37 CFR § 1.116

REMARKS

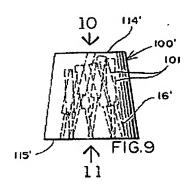
All of the claims have been rejected under Section 103 based on purportedly admitted prior art in view of United States Patent Number 5,050,847 (King). Because modifying the purportedly admitted prior art by the teaching of King, when considered as a whole, does not achieve the claimed structure, Applicant submits that the pending claims are allowable. The claims are not amended in this response.

The office action provides two grounds for modifying the structure disclosed in the present application's paragraphs 0002 to 0005 in view of King. First, the office action states that "King teaches . . . that it was known in the art at the time the invention was made to arrange entry and exit openings . . . in offset relation . . . in order to improve the performance of the gas lance. Because improved performance would also be desirable in the gas lance of the admitted prior art of the instant disclosure, the motivation to arrange the gas channels of the admitted prior art of the instant disclosure so that the exit and entry openings are offset . . . would have been a modification obvious to one of ordinary skill" (office action, page 2). Second, the office action (referring to the purportedly admitted prior art and King) states that "it has been well settled that where the applied prior art shows claimed components (the lance and gas channel) operating in substantially the same manner with substantially the same effect, motivation to alter the shape or configuration of the prior art components without altering the effect of the components, would have been a modification obvious to one of ordinary skill in the art" (office action, page 3).

The teachings of a prior art reference must, of course, be considered as a whole. King not only teaches more than the office action cites it for, but contrary to the statement in the office action, King also does not operate in the same manner as the purportedly admitted prior art.

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The King reference discloses channels 16 oriented radially (Figure 2) or "angled in tangential fashion" (presumably, Figure 3). After introducing these embodiments, however, King states: "The thrust of the invention, however, is to stage the permeable elements in a progressively more buried relationship in the hot face of the injection block sequenced in the order in which the particular passage-ways which are plugged by the porous plug are programmed for



use." (King, col. 1, lns. 2-7, emphasis added). King's Figure 9 is reproduced at right to illustrate the "progressively more buried relationship" of the elements.

In contrast to the express teaching of King — in fact its thrust — the pending independent claim 9 requires "an entry surface, and exit surface, and channels extending therebetween . . . having an entry slit disposed in entry surface and an exit slit disposed in the exit surface." To achieve the structure of the present claims, someone seeking to modify the star-shaped channel configuration of the purportedly admitted prior art would have to disregard what King describes as "the thrust:" that is, the channels are plugged (as shown by reference numeral 61 in Figure 2) or have outlets that are buried below the upper face (as shown in Figures 8 through 16).

Even if a person skilled in the art would seek to combine the purportedly admitted prior art structure and King, he would not achieve the claimed structure. Modifying the star-shaped configuration by the teachings of King, when considered as a whole, would not yield a structure having the claimed "channels extend[] between" the entry and exit surfaces because following King would require plugging or burying the outlets at progressively deeper location).

And it is impermissible to disregard the teaching of King to pick teaching out of context. In this regard, there is no incentive to modify the star-shaped configuration (that is, the purportedly admitted prior art structure) by selectively choosing one of at least two configurations of King while disregarding its most emphatic part: plugging or burying the outlets. Stated another way, King's teaching of progressively plugging or burying the channel outlets itself teaches away from combining the references because its "thrust" is inconsistent with the requirement in the independent claim.

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CONCLUSION

Applicant submits that the claims are in condition for allowance and requests favorable reconsideration of the pending rejections. If the Examiner determines that a telephone conference would further the prosecution of this case, he is invited to telephone the undersigned at his convenience.

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